Third Quarter 2019 Earnings Call

John Plant – Chairman and Chief Executive Officer
Ken Giacobbe – EVP and Chief Financial Officer

November 5, 2019

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Important Information

Forward–Looking Statements

This presentation contains statements that relate to future events and expectations and as such constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as "anticipates," "believes," "could," "estimates," "expects," "forecasts," "goal," "guidance," "intends," "may," "outlook," "plans," "projects," "seeks," "sees," "should," "targets," "will," "would," or other words of similar meaning. All statements that reflect Arconic's expectations, assumptions or projections about the future, other than statements of historical fact, are forward-looking statements, including, without limitation, forecasts and expectations relating to the growth of the aerospace, defense, automotive, industrials, commercial transportation and other end markets; statements and guidance regarding future financial results or operating performance; statements regarding future strategic actions; and statements about Arconic's strategies, outlook, business and financial prospects. These statements reflect beliefs and assumptions that are based on Arconic's perception of historical trends, current conditions and expected future developments, as well as other factors Arconic believes are appropriate in the circumstances. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties and changes in circumstances that are difficult to predict, which could cause actual results to differ materially from those indicated by these statements. Such risks and uncertainties include, but are not limited to: (a) uncertainties regarding the planned separation, including whether it will be completed pursuant to the targeted timing, asset perimeters, and other anticipated terms, if at all; (b) the impact of the separation on the businesses of Arconic; (c) the risk that the businesses will not be separated successfully or such separation may be more difficult, time-consuming or costly than expected, which could result in additional demands on Arconic's resources, systems, procedures and controls, disruption of its ongoing business, and diversion of management's attention from other business concerns; (d) deterioration in global economic and financial market conditions generally; (e) unfavorable changes in the markets served by Arconic; (f) the inability to achieve the level of revenue growth, cash generation, cost savings, improvement in profitability and margins, fiscal discipline, or strengthening of competitiveness and operations anticipated or targeted; (g) competition from new product offerings, disruptive technologies or other developments; (h) political, economic, and regulatory risks relating to Arconic's global operations, including compliance with U.S. and foreign trade and tax laws, sanctions, embargoes and other regulations; (i) manufacturing difficulties or other issues that impact product performance, quality or safety; (j) Arconic's inability to realize expected benefits, in each case as planned and by targeted completion dates, from acquisitions, divestitures, facility closures, curtailments, expansions, or joint ventures; (k) the impact of potential cyber attacks and information technology or data security breaches; (l) the loss of significant customers or adverse changes in customers' business or financial conditions; (m) adverse changes in discount rates or investment returns on pension assets; (n) the impact of changes in aluminum prices and foreign currency exchange rates on costs and results; (o) the outcome of contingencies, including legal proceedings, government or regulatory investigations, and environmental remediation, which can expose Arconic to substantial costs and liabilities; and (p) the other risk factors summarized in Arconic's Form 10-K for the year ended December 31, 2018 and other reports filed with the U.S. Securities and Exchange Commission (SEC). Market projections are subject to the risks discussed above and other risks in the market. The statements in this presentation are made as of the date of this presentation, even if subsequently made available by Arconic on its website or otherwise. Arconic disclaims any intention or obligation to update publicly any forward-looking statements, whether in response to new information, future events, or otherwise, except as required by applicable law.

Important Information (continued)

Non-GAAP Financial Measures

Some of the information included in this presentation is derived from Arconic's consolidated financial information but is not presented in Arconic's financial statements prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). Certain of these data are considered "non-GAAP financial measures" under SEC rules. These non-GAAP financial measures supplement our GAAP disclosures and should not be considered an alternative to the GAAP measure. Reconciliations to the most directly comparable GAAP financial measures and management's rationale for the use of the non-GAAP financial measures can be found in the Appendix to this presentation. Arconic has not provided reconciliations of any forward-looking non-GAAP financial measures, such as earnings per share excluding special items, adjusted free cash flow, EBITDA and adjusted interest expense, to the most directly comparable GAAP financial measures because such reconciliations are not available without unreasonable efforts due to the variability and complexity with respect to the charges and other components excluded from the non-GAAP measures, such as the effects of foreign currency movements, equity income, gains or losses on sales of assets, taxes, and any future restructuring or impairment charges. These reconciling items are in addition to the inherent variability already included in the GAAP measures, which includes, but is not limited to, price/mix and volume. Arconic believes such reconciliations would imply a degree of precision that would be confusing or misleading to investors.

"Organic revenue" is GAAP revenue adjusted for Tennessee Packaging (which completed its phase-down as of year-end 2018), divestitures, and changes in aluminum prices and foreign currency exchange rates relative to prior year period. "Adjusted free cash flow" is cash provided from (used for) operations, less capital expenditures, plus cash receipts from sold receivables. Any reference to historical EBITDA means adjusted EBITDA for which we have provided calculations and reconciliations in the Appendix.

Other Information

In the third quarter of 2019, Arconic realigned its operations by eliminating its Transportation and Construction Solutions (TCS) segment and transferring the Forged Wheels business to the Engineered Products and Forgings (EP&F) segment (formerly named the Engineered Products and Solutions segment) and the Building and Construction Systems (BCS) business to the Global Rolled Products (GRP) segment. The Latin American extrusions business, formerly part of the TCS segment prior to its sale in April of 2018, was moved to Corporate. In the first quarter of 2019, Arconic transferred its Aluminum Extrusions operations from the EP&F segment to the GRP segment. Prior period financial information has been recast to conform to current year presentation.

Arconic Inc. Reporting Two New Segments

Arconic Inc.

Previously

EP&S
Engineered Products and Solutions
- Engine Products
- Fastening Systems
- Engineered Structures

TCS
Transportation and Construction Solutions
- Forged Wheels
- Building and Construction Systems

GRP
Global Rolled Products
- Global Rolled Products
- Aluminum Extrusions

Current

EP&F
Engineered Products & Forgings
- Engine Products
- Fastening Systems
- Engineered Structures
- Forged Wheels

GRP
Global Rolled Products
- Global Rolled Products
- Aluminum Extrusions
- Building and Construction Systems

Post separation

Howmet Aerospace Inc.
Remain Co.

Arconic Corporation
Spin Co.

3Q 2019 Highlights

Revenue (YoY)

- Revenue was $3.6B, up 1%
  - Organic Revenue up 6%
  - Engineered Products & Forgings Segment Organic Revenue up 8%[1]
  - Global Rolled Products Segment Organic Revenue up 5%[2]

Profitability (YoY)

- Operating Income excluding special items up 36%, Margin up 340 bps YoY and 20 bps sequentially[3]
  - Engineered Products & Forgings Segment Operating Profit Margin expanded by 330 bps
  - Global Rolled Products Segment Operating Profit Margin expanded by 330 bps
- Earnings Per Share excluding special items was $0.58, up 81%[4]

Balance Sheet and Cash Flow

- Adjusted Free Cash Flow excluding separation costs $142M 3Q YTD, up $155M YoY[5]
- Completed $1.1B of common stock share repurchases YTD at a weighted avg price of ~$20.67 per share for ~53.2M shares
- Return on Net Assets of 13.8%, up 550 bps YoY[6]

1) Engineered Products & Forgings 3Q 2019 Revenue (GAAP) = $1,794M, 3Q 2018 Revenue (GAAP) = $1,683M; up 7% 2) Global Rolled Products 3Q 2019 Revenue (GAAP) = $1,763M, 3Q 2018 Revenue (GAAP) = $1,839M; down 4% 3) 3Q 2019 Operating income (GAAP) = $326M, 3Q 2018 Operating income (GAAP) = $345M, 2Q 2019 Operating loss (GAAP) = ($81M) 4) 3Q 2019 EPS (GAAP) = $0.21, 3Q 2018 EPS (GAAP) = $0.32 5) Sep YTD 2019 (GAAP): Cash used for operations = ($100M), Cash used for financing activities = ($1,144M), Cash provided from investing activities = $288M; Sep YTD 2018 (GAAP): Cash used for operations = ($209M), Cash used for financing activities = ($609M), Cash provided from investing activities = $211M 6) Based on Net Income of $95M and Net Income excluding Special items of $260M in 3Q 2019 and Net Income of $161M and Net Income excluding special items of $160M in 3Q 2018

See appendix for reconciliations

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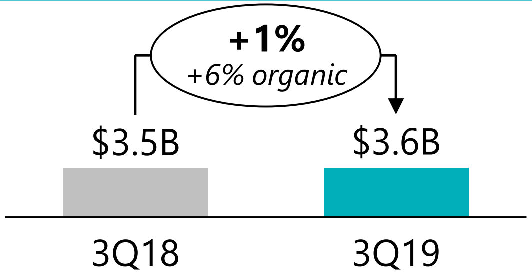
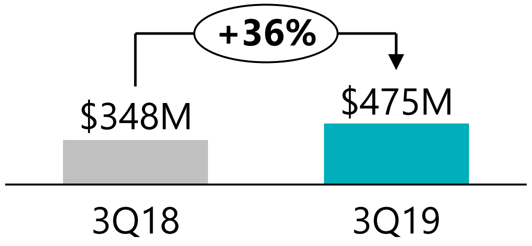
Key Financial Results – 3Q 2019

Revenue[1]



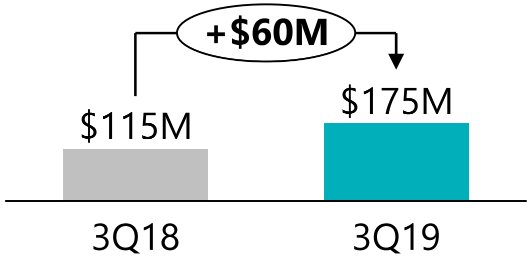
- Revenue increased $35M or 1% YoY
- Organic Revenue increased $220M or 6% YoY
  - EP&F segment increased 8% YoY[5], GRP segment increased 5% YoY[6]
- Organic Growth in Commercial Aerospace, Defense Aerospace, Packaging, Commercial Transportation and Industrial markets

Operating Income Excluding Special Items[2]



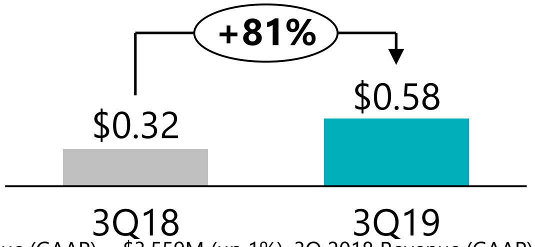
- Price increase of $36M across both Segments
- Volume increase of $22M driven by Aerospace
- Lower raw material costs including aluminum price $39M
- Net Cost reduction impact, partially offset by Tenn Packaging transition to Industrial, Al Extrusions operational challenges in 1 plant and variable comp

Adjusted Free Cash Flow Excluding Separation Costs[3]



- Pension/OPEB cash contributions of $96M, up $26M YoY
- Capex of $108M[7], down $101M YoY

EPS Excluding Special Items[4]



- Increase of $0.26 YoY driven by operational $0.15, lower raw material costs $0.06, lower share count $0.03
- Above prior guidance of $0.47 - $0.53

1) 3Q 2019 Revenue (GAAP) = $3,559M (up 1%), 3Q 2018 Revenue (GAAP) = $3,524M 2) 3Q 2019 Operating income (GAAP) = $326M, 3Q 2018 Operating income (GAAP) = $345M 3) 3Q 2019 (GAAP): Cash provided from operations = $52M, Cash used for financing activities = ($202M), Cash provided from investing activities = $117M; 3Q 2018 (GAAP): Cash provided from operations = $51M, Cash used for financing activities = ($32M), Cash provided from investing activities = $65M 4) 3Q 2019 EPS (GAAP) = $0.21, 3Q 2018 EPS (GAAP) = $0.32 5) Engineered Products & Forgings 3Q 2019 Revenue (GAAP) = $1,794M, 3Q 2018 Revenue (GAAP) = $1,683M; up 7% 6) Global Rolled Products 3Q 2019 Revenue (GAAP) = $1,763M, 3Q 2018 Revenue (GAAP) = $1,839M; down 4% 7) Excluding separation capex of $3M

See appendix for reconciliations

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Pre-Tax Special Items Summary

~80% of YTD special items are non-cash

($M)	3Q19	3Q19 YTD
Asset Impairments / Divestitures	$110	$576
Costs Associated with Planned Separation	$25	$44
Severance Costs / Pension Settlement / OPEB Reduction	$6	$45
Other	$8	$72
TOTAL SPECIAL ITEMS	**$149**	**$737**

Overview of Segment Results – 3Q 2019

	Revenue[1]	Segment Operating Profit[1]	Segment Operating Profit Comments
Engineered Products & Forgings (Former EP&S & Forged Wheels)	$1,794M *Up 7%* *Up 8% Organic*	$363M ***Up 28%**, or $79M* 20.2% Margin ***Up 330 bps***	+ Aerospace Engines & Aerospace Defense growth + Commercial Transportation growth + Lower raw material costs + Price improvements + Net Cost reductions
Global Rolled Products (Former GRP & Building and Construction Systems)	$1,763M *Down 4%* *Up 5% Organic*	$161M ***Up 50%**, or $54M* 9.1% Margin ***Up 330 bps***	+ Packaging, Industrial and Aerospace growth + Industrial and Commercial Transportation price + Aluminum price + Net Cost reductions + Improvements in internal scrap utilization – Aluminum Extrusions operational challenges at 1 plant – Tennessee NA Packaging transition to Industrial ($5M)

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1) Percent changes reflect Year-over-Year changes

See appendix for reconciliations

3Q 2019 Key Achievements

Engineered Products & Forgings

(Former EP&S & Forged Wheels)

- Aerospace Engines Organic Revenue up 11% YoY[1]
- Aerospace Defense Organic Revenue up 18% YoY[2]
- Commercial Transportation Organic Revenue up 6% YoY[3]
- Price improvements of $18M YoY
- Segment Operating Profit Margin expanded by 330 bps

Global Rolled Products

(Former GRP & Building and Construction Systems)

- Commercial Airframe Organic Revenue up 12% YoY[4]
- Price improvements of $18M YoY mainly in Industrial and Commercial Transportation
- Improved internal scrap utilization YoY
- Segment Operating Profit Margin expanded by 330 bps

Cash flows / Other

- Return on Net Assets of 13.8%, up 550 bps YoY[5]
- 3Q YTD Capex of $412M[6], ~70% return seeking, down $85M YoY
- 3Q YTD U.S. pension asset returns ~17% partially offset unfavorable discount rate impact

1) EP&F Commercial Aerospace Engines – Reported: 3Q 2019 = $624M; 3Q 2018 = $566M; up 10% 2) EP&F Defense Aerospace Revenue – Reported: 3Q 2019 = $226M; 3Q 2018 = $192M; up 18% 3) EP&F Commercial Transportation – Reported: 3Q 2019 = $304M; 3Q 2018 = $304M; flat 4) GRP Commercial Aerospace Airframe – Reported: 3Q 2019 = $284M; 3Q 2018 = $257M; up 11% 5) Based on Net Income of $95M and Net income excluding Special items of $260M in 3Q 2019 and Net Income of $161M and Net income excluding special items of $160M in 3Q 2018 6) Excluding separation capex of $3M

See appendix for reconciliations

Update on Key Focus Areas: Ahead or On Track

Cost Reduction / Price Update

- 3Q YTD operating cost reductions were $137M
- 2019 annual cost reductions target increased to $180M, up from prior commitment of $140M
- Run rate operating costs are projected to be reduced by $280M, up from prior commitment of $260M
- 3Q YTD price increases of $111M

Capital Allocation Update

- Repurchased $1.1B of common stock YTD; Average price ~$20.67 per share, ~53.2M shares repurchased
- $400M of common stock share repurchase authority remains
- Convertible Notes matured; settled in cash for $403M on October 15th; Diluted share count reduced by ~15M
- Year-end diluted common stock share count ~440M shares, down 13% YoY
- 3Q YTD Capex of $412M[1], down 17% YoY. ~70% return seeking, ~30% sustaining

3Q 2019 Divestitures

- Divestitures signed or closed YTD with ~$180M net proceeds, Target of ~$100M - $200M
- Divestitures signed or closed will reduce annual revenue by ~$350M with limited operating income impact

Separation

- On track for Separation completion in 2Q 2020; Form 10 filing expected to be available in 4Q 2019
- Appointment / Recruitment of two Boards and Management Teams on track
- Estimated one-time operating costs to separate of $130M - $160M, excluding debt breakage and tax leakage
- Estimated one-time Capex costs to separate of $25M - $35M, majority in 2019
- Debt breakage costs maximum of $35M with Howmet Aerospace Inc. as Remain Co.

1) Excluding separation capex of $3M

See appendix for reconciliations

Global Rolled Products Improvement in Net Price & Positive Mix

- Tennessee Rolling Mill Profit Improvement Plan
  - Transition from Packaging to Industrial products supported by the China common alloy trade case
  - Antidumping Duties and Countervailing Duties enacted ranging from 96%-176%, effective December 2018
  - Term of at least five years

- Reduced Earnings Volatility due to Aluminum Price Movement
  - 90%+ of aluminum price exposure is passed along or hedged

Arconic 2019 Guidance Update[1]

Full Year 2019 Guidance

Revenue	EPS Ex. Special Items	Adjusted Free Cash Flow	EBITDA Ex. Special Items
Prior $14.3B – $14.6B	Prior $1.95 – $2.05	Prior $700M - $800M	Prior ~$2.3B +/- $50M
Updated	***Updated***	***Unchanged***	***Updated***
Current $14.15B – $14.35B	**Current $2.07 – $2.11**	**Current $700M - $800M**	**Current $2.325B +/- $25M**
Organic Growth of 6%-7%		*Capex ~$625M , ~4.4% of revenue*	
– Aluminum Price – Divestitures	+ Cost Reduction + Price Increase – Al Extrusions Operations – Variable Compensation	FCF Conversion[2] ~80%	+ Cost Reduction + Price Increase – Al Extrusions Operations – Variable Compensation

4Q 2019 Guidance

EPS Ex. Special Items: $0.49 - $0.53

1) *All Guidance excludes Separation impacts: Estimated one-time operating costs to separate of $130M - $160M, excluding debt breakage and tax leakage; Estimated one-time Capex costs to separate of $25M - $35M, majority in 2019 See Appendix for additional Guidance assumptions*
2) *FCF Conversion = Adjusted Free Cash Flow excluding separation costs divided by Net Income Excluding Special Items*

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New Segment Historical Performance

($M)		2018	1Q19	2Q19	3Q19
Engineered Products & Forgings (Former EP&S & Forged Wheels)	Revenue	$6,798	$1,756	$1,822	$1,794
	Segment Operating Profit	$1,105	$313	$360	$363
	Segment Operating Profit Margin	16.3%	17.8%	19.8%	20.2%
	Adjusted EBITDA	$1,394	$384	$430	$428
	Adjusted EBITDA Margin	20.5%	21.9%	23.6%	23.9%
Global Rolled Products (Former GRP & Building and Construction Systems)	Revenue	$7,223	$1,784	$1,868	$1,763
	Segment Operating Profit	$481	$135	$179	$161
	Segment Operating Profit Margin	6.7%	7.6%	9.6%	9.1%
	Adjusted EBITDA	$734	$194	$238	$218
	Adjusted EBITDA Margin	10.2%	10.9%	12.7%	12.4%

Segment Operating Profit Margin Improvement

EP&F

3Q19 YoY
+330 bps

3Q19 vs FY18
+390 bps

3Q19 YTD vs FY18
+300 bps

GRP

3Q19 YoY
+330 bps

3Q19 vs FY18
+240 bps

3Q19 YTD vs FY18
+210 bps

2020 Projected Corporate Costs including Corporate D&A: Howmet Aerospace Inc. ~$80M-$90M, Arconic Corp. ~$75M-$85M

2020 Projected FCF Conversion: Howmet Aerospace Inc. > ~80%, Arconic Corp. < ~80%

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2019 Guidance Assumptions

	4Q19 Assumptions	2019 Assumptions	Sensitivities and Comments
Annual Avg. Al Price	Al prices = $2,150/MT *LME Cash = $1,775/MT* *MWP = $375/MT*	Al prices = $2,200/MT *LME Cash = $1,800/MT* *MWP = $400/MT*	• +$100/MT increase = +~$130M Revenue impact / ~($10M) Operating Income impact • +$100/MT increase = ~($25M) LIFO non-cash impact[1]
Capex	~$215M	~$625M	• Excludes estimated Separation impact of $25M - $35M, majority in 2019
Tax Rate	Operational tax %= 26.5% - 28.5% Cash tax %= ~10%	Operational tax %= 26.5% - 28.5% Cash tax %= ~10%	• Excludes impact of potential transactions
Adj. Interest Expense	~$85M	~$340M	• Excludes debt make-whole payments
Depreciation & Amortization	~$135M	~$540M	
FX Rates	EUR: USD 1.13, GBP: USD 1.24	EUR: USD 1.13, GBP: USD 1.24	• + 0.10 USD/EUR = ~$120M Revenue / ~$20M Operating Income • + 0.10 USD/GBP = ~$20M Revenue / ~($5M) Operating Income
Diluted Share Count	~445M	~464M	• Includes impact of $1,100M of share repurchases • 1Q19: 489M, 2Q19: 464M, 3Q19: 457M, 4Q19: ~445M

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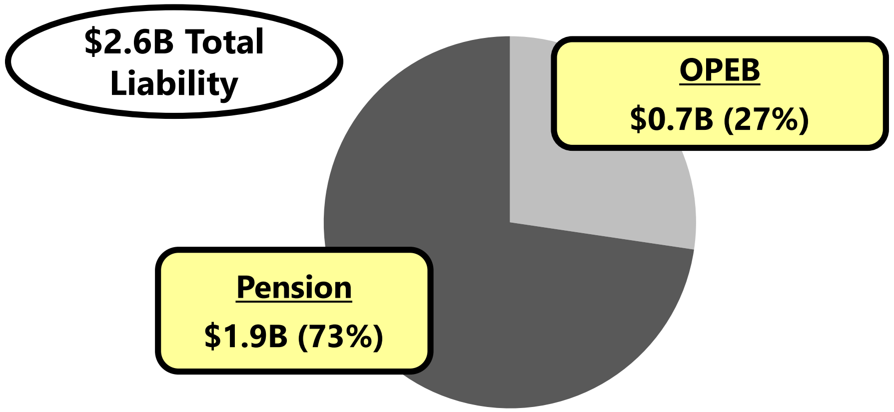
1) LIFO sensitivity includes (~$25M) annually from elements other than aluminum prices such as other raw materials, labor, and energy

Pension and OPEB Summary

Obligations

Unfunded pension and OPEB liability (9/30/2019)



- **2018 pension asset returns: ~ -3.0%**
- **2018 year-end discount rate: ~ 4.35%**
- **Pension plan funded status (12/31/2018):**
  - US ERISA: ~75%
  - Worldwide GAAP: ~67%
- **25 bps discount rate sensitivity:**
  - Pension / OPEB expense: ~$2M (after-tax)
  - Pension / OPEB liability: ~$170M
- **25 bps expected return on assets (EROA) sensitivity:**
  - Pension expense: ~$10M (after-tax)

Expense and Cash Flow

Expense ($M)	FY 2017 Actual	FY 2018 Actual	FY 2019 Estimate
Total Operating Income[1,4]	**$97M**	**$71M[4]**	**~$30M**
Non-Operating	$154M	$112M	~$120M
Total Pension / OPEB-related Expense	**$251M**	**$183M[4]**	**~$150M**

Cash Flow ($M)	FY 2017 Actual	FY 2018 Actual	FY 2019 Estimate
Pension Contributions	$310M	$298M	~$270M[2]
OPEB Payments	$90M	$80M	~$80M[3]
Total Cash Flow	**$400M**	**$378M**	**~$350M**

1) Does not include employer contributions to DC plans
2) Contributions of $217M YTD September 30, 2019
3) Payments of $59M YTD September 30, 2019
4) Includes Inventory Impact of $18M in FY 2018 due to pension accounting change

3Q 2019 Special Items Detail

($M)	Income before income taxes	Net Income	Earnings per diluted share
AS REPORTED	**$209**	**$95**	**$0.21**
Asset impairments associated with planned divestitures	$110	$108	
Costs associated with planned separation	$25	$24	
Cost-Out Program / Other:			
Severance costs	$2	$1	
Pension plan settlement charge	$4	$3	
St. Cosme fasteners plant fire costs	$4	$3	
Legal and other advisory costs related to Grenfell Tower	$1	$1	
Other	$3	$2	
Discrete and other special tax items	N/A	$23	
Subtotal: Special items	**$149**	**$165**	
EXCLUDING SPECIAL ITEMS	**$358**	**$260**	**$0.58**

~75% of pre-tax special items are non-cash

~75% of pre-tax special items are divestiture related

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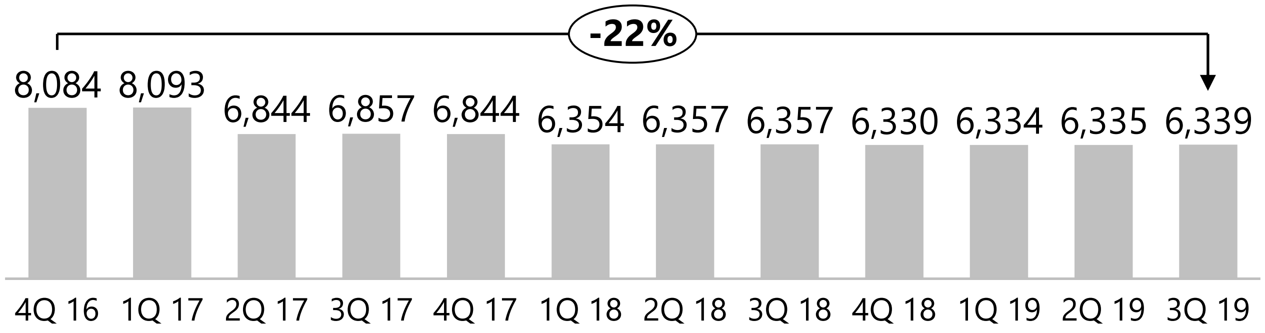
( ) = income to be deducted from As Reported number; + = expense to be added to As Reported number

Capital Structure: $5.0B of Net Debt

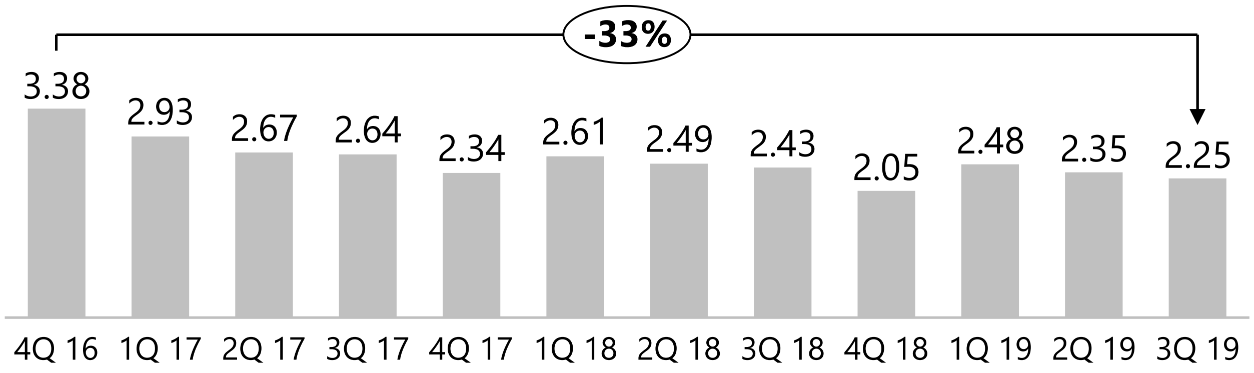
Capitalization at September 30, 2019	
($M)	**Amount**
Cash	$1,321
Gross Debt	$6,339
Net Debt	**$5,018**
Net Debt-to-LTM EBITDA[1]	2.25

Gross Debt ($M)

Paid down $2.5B of debt since Separation on 11/1/2016



Net Debt-to-LTM EBITDA



1) Adjusted for special items; Last twelve month (LTM) Arconic adjusted EBITDA

See appendix for reconciliations

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Organic Revenue[1] Growth for 3Q 2019

	3Q 2018 ($M)	3Q 2019 ($M)	% Change
Arconic Inc. Revenue	$3,524	$3,559	**1%**
less Tennessee Packaging	37	-	
less Eger	7	-	
Subtotal: Portfolio Changes	**44**	**-**	
less Aluminum Price[2]	-	(115)	
less Foreign Currency[2]	-	(26)	
Subtotal: Aluminum Price & Foreign Currency	**-**	**(141)**	
Total: Arconic Inc. Revenue, Organic	**$3,480**	**$3,700**	**6%**

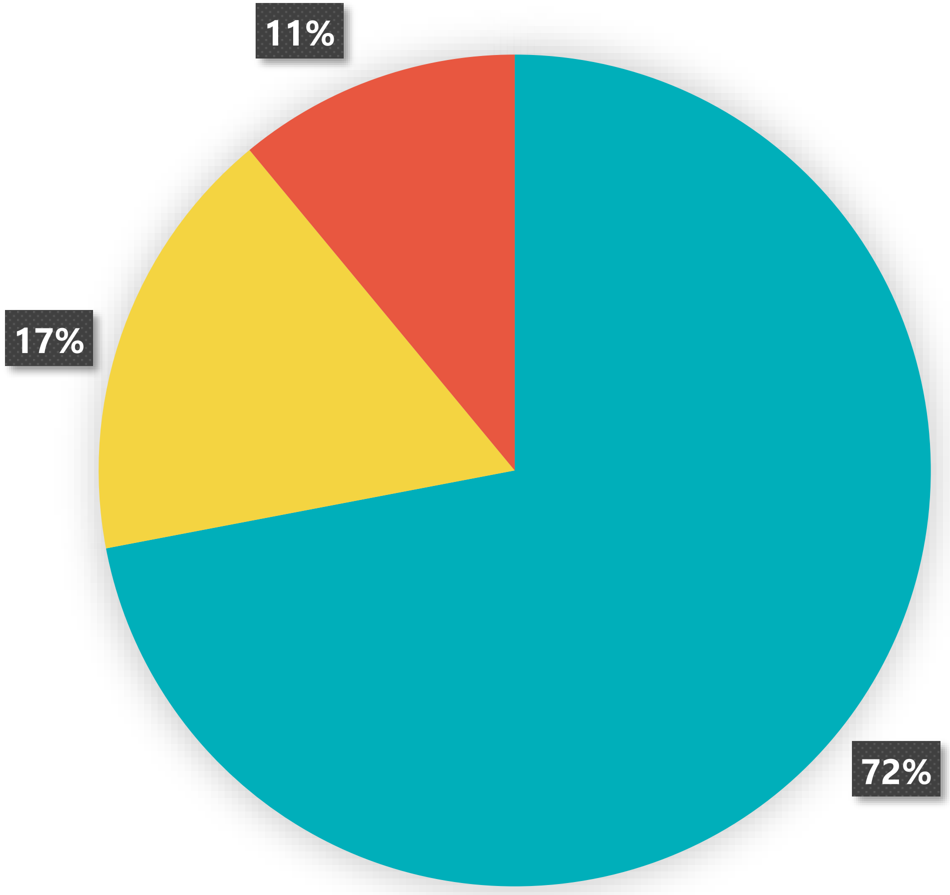
	3Q 2018 ($M)	3Q 2019 ($M)	% Change
Engineered Products & Forgings Revenue	$1,683	$1,794	**7%**
less Eger	7	-	
less Aluminum Price[2]	-	(6)	
less Foreign Currency[2]	-	(12)	
Subtotal: Aluminum Price & Foreign Currency	**-**	**(18)**	
Total: Engineered Products & Forgings Revenue, Organic	**$1,676**	**$1,812**	**8%**

	3Q 2018 ($M)	3Q 2019 ($M)	% Change
Global Rolled Products Revenue	$1,839	$1,763	**-4%**
less Tennessee Packaging	37	-	
less Aluminum Price[2]	-	(109)	
less Foreign Currency[2]	-	(14)	
Subtotal: Aluminum Price & Foreign Currency	**-**	**(123)**	
Total: Global Rolled Products Revenue, Organic	**$1,802**	**$1,886**	**5%**

1) Organic revenue is U.S. GAAP revenue adjusted for Tennessee packaging, divestitures, changes in aluminum prices and foreign currency relative to prior year period.
2) Impacts of changes in aluminum prices and foreign currency relative to the prior year period

Organic Revenue by Market – 3Q 2019

Engineered Products & Forgings
Organic Revenue by Market
(% of total) [1]



Engineered Products & Forgings
Organic Revenue by Market YoY
(% change) [2]

Aerospace	9%
Commercial Transportation	6%
Industrial, Auto & Other	7%

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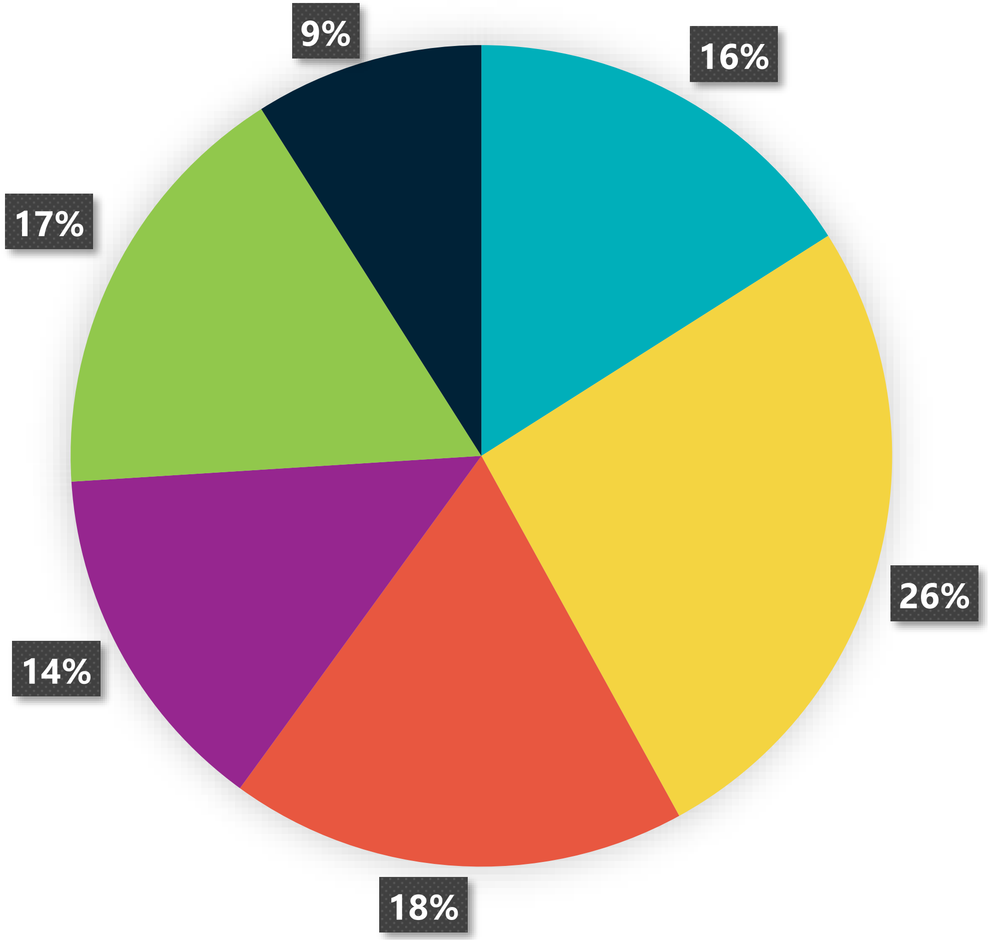
1) Percentage of Total Reported Revenues: Aerospace: 72%; Commercial Transportation: 17%; Industrial, Auto & Other: 11%
2) Year-over-Year change of Reported Revenues: Aerospace: 8%; Commercial Transportation: 0%; Industrial, Auto & Other: 6%. *See appendix for reconciliations*

Organic Revenue by Market – 3Q 2019

Global Rolled Products
Organic Revenue by Market (% of total) [1]



Global Rolled Products
Organic Revenue by Market YoY (% change) [2]

Aerospace	11%
Automotive	(4%)
Building & Construction	(3%)
Packaging (Russia, China and Brazil)	17%
Industrial	13%
Commercial Transportation & Other	6%

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1) Percentage of Total Reported Revenues: Aerospace: 17%; Automotive: 25%; Building & Construction: 19%; Packaging: 13%; Industrial: 17%; Commercial Transportation & Other: 9%.
2) Year-over-Year change of Reported Revenues: Aerospace: 10%; Automotive: (12%); Building & Construction: (6%); Packaging: (10%); Industrial: 5%; Commercial Transportation & Other: (5%). *See appendix for reconciliations*

3Q 2019 YoY Aluminum / Raw Material Price Tailwind

Year-over-Year Operating Income Impact from Aluminum / Raw Material Price Changes

USD Millions	1Q'19 vs 1Q'18	2Q'19 vs 2Q'18	3Q'19 vs 3Q'18
LIFO[1]/Metal Lag	($2)	$21	$35
Trading Desk[2]	$9	($5)	$2
Scrap Spreads	($2)	$1	$0
Operational	$2	$2	$2
Arconic Total	**$7**	**$19**	**$39**

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1) LIFO includes more elements than Al prices such as other raw materials, labor, and energy; in 2019, actual results include deflationary impacts of other raw materials
2) Trading Desk represents 2018 in year impacts only. No Trading Desk impacts in 2019 in year.

Aluminum / Raw Material Price Impacts 3Q 2019 vs. 3Q 2018

Year-over-Year Impact from Aluminum / Raw Material Price Changes

	3Q 2019		
	Revenue ($M)	Operating Income ($M)	Operating Income %
Engineered Products & Forgings	($6)	$27	+150 bps
Global Rolled Products	($109)	$12	+110 bps
Arconic Inc.	**($115)**	**$39**	**+140 bps**

	YTD 2019		
	Revenue ($M)	Operating Income ($M)	Operating Income %
Engineered Products & Forgings	($19)	$43	+90 bps
Global Rolled Products	($291)	$22	+90 bps
Arconic Inc.	**($310)**	**$65**	**+100 bps**

Reconciliation of Net income excluding Special items

($ in millions, except per-share amounts)	Net income excluding Special items		Diluted EPS excluding Special items	
	Quarter ended		Quarter ended	
	September 30, 2018	September 30, 2019	September 30, 2018	September 30, 2019
Net income	$161	$95	$0.32	$0.21
Special items:				
Restructuring and other charges	(2)	119		
Discrete tax items[1]	26	10		
Other special items[2]	(24)	43		
Tax impact[3]	(1)	(7)		
Net income excluding Special items	$160	$260	$0.32	$0.58

Net income excluding Special items and Diluted EPS excluding Special items are non-GAAP financial measures. Management believes that these measures are meaningful to investors because management reviews the operating results of Arconic excluding the impacts of Restructuring and other charges, Discrete tax items, and Other special items (collectively, "Special items"). There can be no assurances that additional special items will not occur in future periods. To compensate for this limitation, management believes that it is appropriate to consider both Net income determined under GAAP as well as Net income excluding Special items.

(1) Discrete tax items for each period included the following:

- for the quarter ended September 30, 2018, a charge to establish a tax reserve in Spain ($59), a net charge related to prior year adjustments in various jurisdictions ($13), a benefit to reverse a foreign tax reserve that is effectively settled ($38), and benefits resulting from the Company's then ongoing analysis of the U.S. Tax Cuts and Jobs Act of 2017 related to the one-time transition tax ($2) and U.S. rate change impacts ($6); and
- for the quarter ended September 30, 2019, a charge related to the adjustment of prior year taxes ($9), a charge for interest accruals for the potential underpayment of taxes ($2), and a benefit to remeasure certain deferred tax assets as a result of a foreign tax rate change ($1).

(2) Other special items for each period included the following:

- for the quarter ended September 30, 2018, a benefit from establishing a tax indemnification receivable ($29) reflecting Alcoa Corporation's 49% share of the Spanish tax reserve and legal and other advisory costs related to Grenfell Tower ($5); and
- for the quarter ended September 30, 2019, costs associated with the planned separation of Arconic ($25), an unfavorable tax impact related to the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit was recognized ($7), an unfavorable tax impact resulting from the difference between Arconic's consolidated estimated annual effective tax rate and the statutory rate applicable to special items ($6), costs related to a fire at a fasteners plant ($4), and legal and other advisory costs related to Grenfell Tower ($1).

(3) The tax impact on Special items is based on the applicable statutory rates whereby the difference between such rates and Arconic's consolidated estimated annual effective tax rate is itself a Special item.

The average number of shares applicable to diluted EPS excluding Special items, includes certain share equivalents as their effect was dilutive. For all periods presented, share equivalents associated with outstanding employee stock options and awards and shares underlying outstanding convertible debt (acquired through the acquisition of RTI International Metals, Inc (RTI)) were dilutive based on Net income excluding Special items. The average number of shares applicable to diluted EPS excluding Special items for 2019 included the impact of the accelerated share repurchase programs of the Company's common stock.

Reconciliation of Net income excluding Special items

($ in millions, except per-share amounts)	Net income excluding Special items		Diluted EPS excluding Special items	
	Nine months ended		Nine months ended	
	September 30, 2018	September 30, 2019	September 30, 2018	September 30, 2019
Net income	$424	$161	$0.86	$0.35
Special items:				
Restructuring and other charges	20	630		
Discrete tax items[1]	49	(25)		
Other special items[2]	43	96		
Tax impact[3]	(22)	(125)		
Net income excluding Special items	$514	$737	$1.04	$1.58

Net income excluding Special items and Diluted EPS excluding Special items are non-GAAP financial measures. Management believes that these measures are meaningful to investors because management reviews the operating results of Arconic excluding the impacts of Restructuring and other charges, Discrete tax items, and Other special items (collectively, "Special items"). There can be no assurances that additional special items will not occur in future periods. To compensate for this limitation, management believes that it is appropriate to consider both Net income determined under GAAP as well as Net income excluding Special items.

(1) Discrete tax items for each period included the following:

- for the nine months ended September 30, 2018, a charge to establish a tax reserve in Spain ($59); a net charge related to prior year adjustments in various jurisdictions ($13); a net charge resulting from the Company's then ongoing analysis of the U.S. Tax Cuts and Jobs Acts of 2017 related to an increase in the one-time transition tax ($16) and a charge for AMT credits expected to be refunded upon filing the 2018 tax return that will result in no benefit under government sequestration ($3), partially offset by beneficial U.S. rate change impacts ($6); a benefit to reverse a foreign tax reserve that is effectively settled ($38), and a charge for a number of small items ($2); and
- for the nine months ended September 30, 2019, a benefit associated with the deduction of foreign taxes that were previously claimed as a U.S. foreign tax credit ($25), a benefit for foreign tax rate changes ($13), a charge related to the adjustment of prior year taxes ($9), a charge for interest accruals for potential underpayment of taxes ($3), and a net charge for a number of small items ($1).

(2) Other special items for each period included the following:

- for the nine months ended September 30, 2018, costs related to settlements of certain customer claims primarily related to product introductions ($38), a benefit from establishing a tax indemnification receivable ($29) reflecting Alcoa Corporation's 49% share of the Spanish tax reserve, costs related to the early redemption of the Company's then outstanding 5.720% Senior Notes due 2019 ($19), legal and other advisory costs related to Grenfell Tower ($14), and a charge for a number of small tax items ($1); and
- for the nine months ended September 30, 2019, costs associated with the planned separation of Arconic ($44), costs associated with ongoing environmental remediation ($25), an unfavorable tax impact related to the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit was recognized ($16), costs associated with negotiation of the collective bargaining agreement with the USW ($9), an impairment of assets of the energy business ($9), costs related to a fire at a fasteners plant ($8), legal and other advisory costs related to Grenfell Tower ($6), strategy and portfolio review costs ($6), and a favorable tax impact resulting from the difference between Arconic's consolidated estimated annual effective tax rate and the statutory rate applicable to special items ($27).

(3) The tax impact on Special items is based on the applicable statutory rates whereby the difference between such rates and Arconic's consolidated estimated annual effective tax rate is itself a Special item.

The average number of shares applicable to diluted EPS excluding Special items, includes certain share equivalents as their effect was dilutive. For all periods presented, share equivalents associated with outstanding employee stock options and awards and shares underlying outstanding convertible debt (acquired through the acquisition of RTI) were dilutive based on Net income excluding Special items. The average number of shares applicable to diluted EPS excluding Special items for 2019 included the impact of the accelerated share repurchase programs of the Company's common stock.

Reconciliation of Operational Tax Rate

($ in millions)	Quarter ended September 30, 2019			Nine months ended September 30, 2019		
	As reported	**Special items[1]**	**As adjusted**	**As reported**	**Special items[1]**	**As adjusted**
Income before income taxes	$209	$149	$358	$271	$737	$1,008
Provision for income taxes	114	(16)	98	110	161	271
Operational tax rate	54.5%		27.4%	40.6%		26.9%

Operational tax rate is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management reviews the operating results of Arconic excluding the impacts of Special items. There can be no assurances that additional Special items will not occur in future periods. To compensate for this limitation, management believes that it is appropriate to consider both the Effective tax rate determined under GAAP as well as the Operational tax rate.

(1) See Net income excluding Special items reconciliation above for a description of Special items.

Calculation of Engineered Products and Forgings Segment Operating Profit Margin

($ in millions)	3Q18	4Q18	2018	1Q19	2Q19	3Q19
Segment operating profit	$284	$268	$1,105	$313	$360	$363
Third-party sales	$1,683	$1,715	$6,798	$1,756	$1,822	$1,794
Segment operating profit margin	16.9%	15.6%	16.3%	17.8%	19.8%	20.2%

In the third quarter of 2019, the Company realigned its operations by eliminating its Transportation and Construction Solutions (TCS) segment and transferring the Forged Wheels business to its Engineered Products and Forgings segment (formerly named the Engineered Products and Solutions segment) and the Building and Construction Systems business to its Global Rolled Products segment. The Latin American extrusions business, which was formerly part of the Company's TCS segment until its sale in April of 2018, was moved to Corporate. In the first quarter of 2019, the Company transferred its Aluminum Extrusions operations from the Engineered Products and Forgings segment to the Global Rolled Products segment. Prior period financial information has been recast to conform to current year presentation.

Segment performance under Arconic’s management reporting system is evaluated based on a number of factors; however, the primary measure of performance is Segment operating profit. Arconic’s definition of Segment operating profit is Operating income excluding Special items. Special items include Restructuring and other charges. Segment operating profit includes the impact of LIFO inventory accounting, metal price lag, intersegment profit eliminations, and derivative activities.

Calculation of Global Rolled Products Segment Operating Profit Margin

($ in millions)	3Q18	4Q18	2018	1Q19	2Q19	3Q19
Segment operating profit[(1)]	$107	$93	$481	$135	$179	$161
Third-party sales	$1,839	$1,755	$7,223	$1,784	$1,868	$1,763
Segment operating profit margin	5.8%	5.3%	6.7%	7.6%	9.6%	9.1%
Third-party aluminum shipments (kmt)	330	319	1,301	331	367	351

In the third quarter of 2019, the Company realigned its operations by eliminating its Transportation and Construction Solutions (TCS) segment and transferring the Forged Wheels business to its Engineered Products and Forgings segment (formerly named the Engineered Products and Solutions segment) and the Building and Construction Systems business to its Global Rolled Products segment. The Latin American extrusions business, which was formerly part of the Company's TCS segment until its sale in April of 2018, was moved to Corporate. In the first quarter of 2019, the Company transferred its Aluminum Extrusions operations from the Engineered Products and Forgings segment to the Global Rolled Products segment. Prior period financial information has been recast to conform to current year presentation.

Segment performance under Arconic's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is Segment operating profit. Arconic's definition of Segment operating profit is Operating income excluding Special items. Special items include Restructuring and other charges. Segment operating profit includes the impact of LIFO inventory accounting, metal price lag, intersegment profit eliminations, and derivative activities.

(1) Segment operating profit in 2018 included the impact of a $23 charge related to a physical inventory adjustment at one plant.

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Calculation of Total Segment Operating Profit Margin

($ in millions)	3Q18	4Q18	2018	1Q19	2Q19	3Q19
Sales – Engineered Products and Forgings	$1,683	$1,715	$6,798	$1,756	$1,822	$1,794
Sales – Global Rolled Products	1,839	1,755	7,223	1,784	1,868	1,763
Total segment sales	$3,522	$3,470	$14,021	$3,540	$3,690	$3,557
Total segment operating profit(1)(2)	$391	$361	$1,586	$448	$539	$524
Total segment operating profit margin	11.1%	10.4%	11.3%	12.7%	14.6%	14.7%

In the third quarter of 2019, the Company realigned its operations by eliminating its Transportation and Construction Solutions (TCS) segment and transferring the Forged Wheels business to its Engineered Products and Forgings segment (formerly named the Engineered Products and Solutions segment) and the Building and Construction Systems business to its Global Rolled Products segment. The Latin American extrusions business, which was formerly part of the Company's TCS segment until its sale in April of 2018, was moved to Corporate. In the first quarter of 2019, the Company transferred its Aluminum Extrusions operations from the Engineered Products and Forgings segment to the Global Rolled Products segment. Prior period financial information has been recast to conform to current year presentation.

Segment performance under Arconic's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is Segment operating profit. Arconic's definition of Segment operating profit is Operating income excluding Special items. Special items include Restructuring and other charges. Segment operating profit includes the impact of LIFO inventory accounting, metal price lag, intersegment profit eliminations, and derivative activities.

(1) See Reconciliation of Total segment operating profit to Consolidated income before income taxes.

(2) For 2018, Segment operating profit for the Global Rolled Product segment included the impact of a $23 charge related to a physical inventory adjustment at one plant.

Reconciliation of Total segment operating profit to Consolidated income before income taxes

($ in millions)	3Q18	4Q18	2018	1Q19	2Q19	3Q19
Total segment operating profit[(1)]	$391	$361	$1,586	$448	$539	$524
Unallocated amounts:						
Restructuring and other charges	2	11	(9)	(12)	(499)	(119)
Corporate expense[(2)]	(48)	(49)	(252)	(62)	(121)	(79)
Consolidated operating income (loss)	345	323	1,325	374	(81)	326
Interest expense[(3)]	(88)	(87)	(378)	(85)	(85)	(86)
Other expense, net	(8)	(10)	(79)	(32)	(29)	(31)
Consolidated income (loss) before income taxes	$249	$226	$868	$257	$(195)	$209

Segment performance under Arconic's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is Segment operating profit. Arconic's definition of Segment operating profit is Operating income excluding Special items. Special items include Restructuring and other charges. Segment operating profit includes the impact of LIFO inventory accounting, metal price lag, intersegment profit eliminations, and derivative activities. Differences between certain segment totals and consolidated Arconic are in Corporate.

(1) For 2018, Segment operating profit for the Global Rolled Product segment included the impact of a $23 charge related to a physical inventory adjustment at one plant.

(2) For 2018, Corporate expense included $38 of costs related to settlements of certain customer claims primarily related to product introductions. For the quarter ended June 30, 2019, Corporate expense included $25 of costs associated with ongoing environmental remediation; $16 of costs associated with the planned separation of Arconic; $9 of costs associated with negotiation of the collective bargaining agreement with the United Steelworkers (USW); $9 impairment of assets of the energy business; and $4 of costs related to a fire at a fasteners plant. For the quarter ended September 30, 2019, Corporate expense included $25 of costs associated with the planned separation of Arconic and $4 of costs related to a fire at a fasteners plant.

(3) For 2018, Interest expense included $19 related to the early redemption of the Company's then outstanding 5.720% Senior Notes due 2019.

Reconciliation of Operating Income Excluding Special Items and Operating Income Margin, Excluding Special Items

($ in millions)	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19
Operating income (loss)	$333	$324	$345	$323	$1,325	$374	$(81)	$326
Special items:								
Restructuring and other charges	7	15	(2)	(11)	9	12	499	119
Costs associated with planned separation	—	—	—	—	—	3	16	25
Environmental remediation	—	—	—	—	—	—	25	—
Collective bargaining agreement negotiation	—	—	—	—	—	—	9	—
Impairment of energy business assets	—	—	—	—	—	—	9	—
Legal and other advisory costs related to Grenfell Tower	5	4	5	4	18	2	3	1
Strategy and portfolio review costs	—	—	—	7	7	6	—	—
Fasteners plant fire costs	—	—	—	—	—	—	4	4
Settlements of certain customer claims primarily related to product introductions	—	38	—	—	38	—	—	—
Operating income excluding Special items	$345	$381	$348	$323	$1,397	$397	$484	$475
Sales	$3,445	$3,573	$3,524	$3,472	$14,014	$3,541	$3,691	$3,559
Operating income margin	9.7%	9.1%	9.8%	9.3%	9.5%	10.6%	n/a	9.2%
Operating income margin, excluding Special items	10.0%	10.7%	9.9%	9.3%	10.0%	11.2%	13.1%	13.3%

Operating income excluding Special items and Operating income margin, excluding Special items are non-GAAP financial measures. Management believes that these measures are meaningful to investors because management reviews the operating results of Arconic excluding the impacts of Special items. There can be no assurances that additional Special items will not occur in future periods. To compensate for this limitation, management believes that it is appropriate to consider both Operating (loss) income determined under GAAP as well as Operating income excluding Special items.

Reconciliation of Adjusted Free Cash Flow

($ in millions)	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19
Cash (used for) provided from operations	$(436)	$176	$51	$426	$217	$(258)	$106	$52
Cash receipts from sold receivables	136	284	273	323	1,016	160	257	213
Capital expenditures	(117)	(171)	(209)	(271)	(768)	(168)	(136)	(111)
Adjusted free cash flow	(417)	289	115	478	465	(266)	227	154
Costs associated with planned separation	—	—	—	—	—	1	5	21
Adjusted free cash flow, excluding costs associated with planned separation	$(417)	$289	$115	$478	$465	$(265)	$232	$175

Accounting guidance effective in 2018 changed the classification of Cash receipts from sold receivables in the cash flow statement, reclassifying it from operating activities to investing activities. Under the prior accounting guidance, Cash receipts from sold receivables were included in (increase) decrease in receivables in the operating activities section of the statement of cash flows.

Net cash funding from the sale of accounts receivables has remained unchanged at $350 million each quarter since the first quarter of 2016.

There has been no change in the net cash funding in the sale of accounts receivable program in the third quarter of 2019. It remains at $350.

Adjusted free cash flow and Adjusted free cash flow, excluding costs associated with planned separation are non-GAAP financial measures. Management believes that these measures are meaningful to investors because management reviews cash flows generated from operations after taking into consideration capital expenditures (due to the fact that these expenditures are considered necessary to maintain and expand Arconic’s asset base and are expected to generate future cash flows from operations), cash receipts from net sales of beneficial interest in sold receivables, as well as costs associated with the planned separation. It is important to note that Adjusted free cash flow and Adjusted free cash flow, excluding costs associated with the planned separation does not represent the residual cash flow available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements, are not deducted from the measure.

Reconciliation of Organic Revenue

($ in millions)	Quarter ended June 30,		Quarter ended September 30,		Nine months ended September 30,	
	2018	2019	2018	2019	2018	2019
Arconic						
Sales	$3,573	$3,691	$3,524	$3,559	$10,542	$10,791
Less:						
Sales – Eger forgings	9	—	7	—	26	—
Sales – Latin America extrusions	—	—	—	—	25	—
Sales – Tennessee packaging	46	—	37	—	126	—
Aluminum price impact	n/a	(136)	n/a	(115)	n/a	(310)
Foreign currency impact	n/a	(35)	n/a	(26)	n/a	(116)
Arconic Organic revenue	$3,518	$3,862	$3,480	$3,700	$10,365	$11,217
Engineered Products and Forgings						
Sales	$1,734	$1,822	$1,683	$1,794	$5,083	$5,372
Less:						
Sales – Eger forgings	9	—	7	—	26	—
Aluminum price impact	n/a	(13)	n/a	(6)	n/a	(19)
Foreign currency impact	n/a	(18)	n/a	(12)	n/a	(51)
Engineered Products and Forgings Organic revenue	$1,725	$1,853	$1,676	$1,812	$5,057	$5,442
Global Rolled Products						
Sales	$1,875	$1,868	$1,839	$1,763	$5,468	$5,415
Less:						
Sales – Tennessee packaging	46	—	37	—	126	—
Aluminum price impact	n/a	(123)	n/a	(109)	n/a	(291)
Foreign currency impact	n/a	(17)	n/a	(14)	n/a	(65)
Global Rolled Products Organic revenue	$1,829	$2,008	$1,802	$1,886	$5,342	$5,771

Organic revenue is a non-GAAP financial measure. Management believes this measure is meaningful to investors as it presents revenue on a comparable basis for all periods presented due to the impact of the sale of the forgings business in Eger, Hungary (divested in December 2018), the sale of Latin America extrusions (divested in April 2018), the ramp-down of Arconic's North American packaging business at its Tennessee operations (completed in December 2018), and the impact of changes in aluminum prices and foreign currency fluctuations relative to the prior year periods. The revenue from a small manufacturing facility that was divested in the second quarter of 2019 and the small energy business that was divested in the third quarter of 2019 was not material and therefore is included in Organic revenue.

Reconciliation of Net Debt

($ in millions)	September 30, 2017	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019
Short-term debt	$55	$38	$45	$45	$42	$434	$435	$434	$1,434
Long-term debt, less amount due within one year	6,802	6,806	6,309	6,312	6,315	5,896	5,899	5,901	4,905
Total debt	6,857	6,844	6,354	6,357	6,357	6,330	6,334	6,335	6,339
Less: Cash and cash equivalents	1,815	2,150	1,205	1,455	1,535	2,277	1,319	1,357	1,321
Net debt	$5,042	$4,694	$5,149	$4,902	$4,822	$4,053	$5,015	$4,978	$5,018

Net debt is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management assesses Arconic's leverage position after factoring in available cash that could be used to repay outstanding debt.

Reconciliation of Net debt to Adjusted EBITDA Excluding Special Items

($ in millions)	Trailing-12 months ended								
	September 30, 2017	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019
Net (loss) income attributable to Arconic	$ (605)	$ (74)	$ (253)	$ (345)	$ (303)	$ 642	$ 686	$ 445	$ 379
Discontinued operations	(33)	—	—	—	—	—	—	—	—
(Loss) income from continuing operations after income taxes and non-controlling interests	$ (638)	$ (74)	$ (253)	$ (345)	$ (303)	$ 642	$ 686	$ 445	$ 379
Add:									
Provision for income taxes	1,518	544	438	455	490	226	240	92	118
Other (income) expense, net	(435)	(486)	(150)	23	(7)	79	91	79	102
Interest expense	526	496	495	401	389	378	349	345	343
Restructuring and other charges	240	165	99	88	67	9	14	498	619
Impairment of goodwill	—	719	719	719	719	—	—	—	—
Provision for depreciation and amortization	543	551	560	567	568	576	571	566	556
Adjusted EBITDA	$ 1,754	$ 1,915	$ 1,908	$ 1,908	$ 1,923	$ 1,910	$ 1,951	$ 2,025	$ 2,117
Add:									
Costs associated with planned separation	$ 94	$ 18	$ —	$ —	$ —	$ —	$ 3	$ 19	$ 44
Environmental remediation	—	—	—	—	—	—	—	25	25
Collective bargaining agreement negotiation	—	—	—	—	—	—	—	9	9
Impairment of energy business assets	—	—	—	—	—	—	—	9	9
Fasteners plant fire costs	—	—	—	—	—	—	—	4	8
Proxy, advisory and governance-related costs	58	58	42	—	—	—	—	—	—
Legal and other advisory costs related to Grenfell Tower	7	14	19	23	21	18	15	14	10
Settlements of certain customer claims primarily related to product introductions	—	—	—	38	38	38	38	—	—
Strategy and portfolio review costs	—	—	—	—	—	7	13	13	13
Delaware reincorporation costs	—	3	3	3	3	—	—	—	—
Adjusted EBITDA excluding Special items	$ 1,913	$ 2,008	$ 1,972	$ 1,972	$ 1,985	$ 1,973	$ 2,020	$ 2,118	$ 2,235
Net debt	$ 5,042	$ 4,694	$ 5,149	$ 4,902	$ 4,822	$ 4,053	$ 5,015	$ 4,978	$ 5,018
Net debt to Adjusted EBITDA excluding Special items	2.64	2.34	2.61	2.49	2.43	2.05	2.48	2.35	2.25

Arconic's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) is net margin plus an add-back for depreciation and amortization. Net margin is equivalent to Sales minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; Research and development expenses; and Provision for depreciation and amortization. Management believes that this measure is meaningful to investors because it provides additional information with respect to Arconic's operating performance and the Company's ability to meet its financial obligations. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies.

Net debt is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management assesses Arconic's leverage position after factoring in available cash that could be used to repay outstanding debt.

Reconciliation of Return on Net Assets (RONA)

($ in millions)	Quarter ended June 30, 2018	Quarter ended June 30, 2019	Quarter ended September 30, 2018	Quarter ended September 30, 2019	Nine months ended September 30, 2018	Nine months ended September 30, 2019
Net income (loss)	$120	$(121)	$161	$95	$424	$161
Special items[1]	65	390	(1)	165	90	576
Net income excluding Special items	$185	$269	$160	$260	$514	$737
Annualized net income excluding Special items	$740	$1,076	$640	$1,040	$685	$983
Net Assets:	**June 30, 2018**	**June 30, 2019**	**September 30, 2018**	**September 30, 2019**	**September 30, 2018**	**September 30, 2019**
Add: Receivables from customers, less allowances	$1,159	$1,155	$1,147	$1,116	$1,147	$1,116
Add: Deferred purchase program[2]	313	426	362	461	362	461
Add: Inventories	2,659	2,606	2,622	2,555	2,622	2,555
Less: Accounts payable, trade	2,024	2,095	2,061	1,988	2,061	1,988
Working capital	2,107	2,092	2,070	2,144	2,070	2,144
Properties, plants, and equipment, net (PP&E)	5,582	5,517	5,645	5,377	5,645	5,377
Net assets - total	$7,689	$7,609	$7,715	$7,521	$7,715	$7,521
RONA	9.6%	14.1%	8.3%	13.8%	8.9%	13.1%

RONA is a non-GAAP financial measure. RONA is calculated as Net income excluding Special items divided by working capital and net PP&E. Management believes that this measure is meaningful to investors as RONA helps management and investors determine the percentage of net income the company is generating from its assets. This ratio tells how effectively and efficiently the company is using its assets to generate earnings.

[1] See Reconciliation of Net income excluding Special items for a description of Special items.

[2] The Deferred purchase program relates to an arrangement to sell certain customer receivables to several financial institutions on a recurring basis. Arconic is adding back the receivable for the purposes of the Working capital calculation

Reconciliation of Days Working Capital

($ in millions)	Quarter ended September 30, 2018		Quarter ended September 30, 2019	
Receivables from customers, less allowances	$	1,147	$	1,116
Add: Deferred purchase program(1)		362		461
Add: Inventories		2,622		2,555
Less: Accounts payable, trade		2,061		1,988
Working capital	$	2,070	$	2,144
Sales	$	3,524	$	3,559
Days Working Capital		54		55

Days Working Capital is a non-GAAP financial measure and is calculated as Working Capital / (Sales / number of days in quarter). Management believes that this measure is meaningful to investors because Days Working Capital reflects the capital tied up during a given quarter.

(1) The Deferred purchase program relates to an arrangement to sell certain customer receivables to several financial institutions on a recurring basis. Arconic is adding back the receivable for the purposes of the Working capital calculation.

Reconciliation of Corporate Expense Excluding Special Items

($ in millions)	1Q18	2Q18	3Q18	4Q18	2018	1Q19	2Q19	3Q19
Corporate expense	$61	$94	$48	$49	$252	$62	$121	$79
Special items:								
Costs associated with planned separation	—	—	—	—	—	3	16	25
Legal and other advisory costs related to Grenfell Tower	5	4	5	4	18	2	3	1
Strategy and portfolio review costs	—	—	—	7	7	6	—	—
Fasteners plant fire costs	—	—	—	—	—	—	4	4
Collective bargaining agreement negotiation	—	—	—	—	—	—	9	—
Impairment of energy business assets	—	—	—	—	—	—	9	—
Environmental remediation	—	—	—	—	—	—	25	—
Settlements of certain customer claims primarily related to product introductions	—	38	—	—	38	—	—	—
Corporate expense excluding Special items	$56	$52	$43	$38	$189	$51	$55	$49

Corporate expense excluding Special items is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management reviews the operating results of Arconic excluding the impacts of Special items. There can be no assurances that additional Special items will not occur in future periods. To compensate for this limitation, management believes that it is appropriate to consider both Corporate expense determined under GAAP as well as Corporate expense excluding Special items.

Reconciliation of Arconic End Markets Organic Revenue

($ in millions)	Aero Engine	Aero Airframe	Aero Defense	Commerical Transportation	Packaging	Automotive	Building and Construction	Industrial and Other
3Q18								
Revenue	$568	$689	$206	$449	$264	$525	$351	$472
Sales – Eger forgings	—	—	—	7	—	—	—	—
Sales – Tennessee packaging	—	—	—	—	37	—	—	—
Organic Revenue	$568	$689	$206	$442	$227	$525	$351	$472
3Q19								
Revenue	$626	$724	$242	$444	$237	$464	$329	$493
Aluminum price impact	—	(4)	—	(18)	(26)	(37)	(9)	(21)
Foreign currency impact	(4)	—	(1)	(5)	(2)	(3)	(4)	(7)
Organic Revenue	$630	$728	$243	$467	$265	$504	$342	$521

Arconic end markets organic revenue is a non-GAAP financial measure. Management believes this measure is meaningful to investors as it presents Arconic end markets revenue on a comparable basis for all periods presented due to the impact of the ramp-down of Arconic's North American packaging business at its Tennessee operations (completed in December 2018), the sale of the forgings business in Eger, Hungary (divested in December 2018), and the impact of changes in aluminum prices and foreign currency fluctuations relative to the prior year periods. The revenue from a small manufacturing facility that was divested in the second quarter of 2019 and the small energy business that was divested in the third quarter of 2019 was not material and therefore is included in Organic revenue.

Reconciliation of Segment End Markets Organic Revenue

($ in millions)	Aero Engine	Aero Airframe	Aero Defense	Commercial Transportation	Packaging	Automotive	Building and Construction	Industrial	Other
Engineered Products and Forgings									
3Q18									
Revenue	$566	$432	$192	$304	$—	$16	$—	$15	$158
Sales – Eger forgings	—	—	—	7	—	—	—	—	—
Organic Revenue	$566	$432	$192	$297	$—	$16	$—	$15	$158
3Q19									
Revenue	$624	$440	$226	$304	$—	$16	$—	$12	$172
Aluminum price impact	—	(1)	—	(6)	—	—	—	—	1
Foreign currency impact	(4)	—	(1)	(4)	—	—	—	—	(3)
Organic Revenue	$628	$441	$227	$314	$—	$16	$—	$12	$174
Global Rolled Products									
3Q18									
Revenue	$2	$257	$14	$145	$264	$509	$351	$277	$20
Sales – Tennessee packaging	—	—	—	—	37	—	—	—	—
Organic Revenue	$2	$257	$14	$145	$227	$509	$351	$277	$20
3Q19									
Revenue	$1	$284	$16	$139	$237	$448	$329	$292	$17
Aluminum price impact	—	(4)	—	(12)	(26)	(37)	(9)	(17)	(4)
Foreign currency impact	—	1	—	(2)	(2)	(3)	(4)	(3)	(1)
Organic Revenue	$1	$287	$16	$153	$265	$488	$342	$312	$22

Segment end markets organic revenue is a non-GAAP financial measure. Management believes this measure is meaningful to investors as it presents Segment end markets revenue on a comparable basis for all periods presented due to the impact of the ramp-down of Arconic's North American packaging business at its Tennessee operations (completed in December 2018), the sale of the forgings business in Eger, Hungary (divested in December 2018), and the impact of changes in aluminum prices and foreign currency fluctuations relative to the prior year periods. The revenue from a small manufacturing facility that was divested in the second quarter of 2019 and the small energy business that was divested in the third quarter of 2019 was not material and therefore is included in Organic revenue.

Reconciliation of Capital Expenditures, Excluding Costs Associated with Planned Separation

($ in millions)	Quarter ended September 30, 2018	Quarter ended September 30, 2019	Nine months ended September 30, 2018	Nine months ended September 30, 2019
Capital expenditures	$209	$111	$497	$415
Costs associated with planned separation	—	3	—	3
Capital expenditures, excluding costs associated with planned separation	$209	$108	$497	$412

Capital expenditures, excluding costs associated with planned separation is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management reviews the operating results of Arconic excluding the impacts of costs associated with planned separation. There can be no assurances that additional costs associated with planned separation will not occur in future periods. To compensate for this limitation, management believes that it is appropriate to consider both Capital expenditures determined under GAAP as well as Capital expenditures, excluding costs associated with planned separation.

Reconciliation of Segment Adjusted EBITDA

($ in millions)	2018	1Q19	2Q19	3Q19
Engineered Products and Forgings				
Segment operating profit	$1,105	$313	$360	$363
Provision for depreciation and amortization	289	71	70	65
Adjusted EBITDA	$1,394	$384	$430	$428
Third-party sales	$6,798	$1,756	$1,822	$1,794
Adjusted EBITDA margin	20.5%	21.9%	23.6%	23.9%
Global Rolled Products				
Segment operating profit	$481	$135	$179	$161
Provision for depreciation and amortization	253	59	59	57
Adjusted EBITDA	$734	$194	$238	$218
Third-party sales	$7,223	$1,784	$1,868	$1,763
Adjusted EBITDA margin	10.2%	10.9%	12.7%	12.4%

Adjusted EBITDA and Adjusted EBITDA margin are non-GAAP financial measures. Management believes that these measures are meaningful to investors because Adjusted EBITDA and Adjusted EBITDA margin provide additional information with respect to Arconic's operating performance and the Company's ability to meet its financial obligations. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies. Arconic's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) is net margin plus an add-back for depreciation and amortization. Net margin is equivalent to Sales minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; Research and development expenses; and Provision for depreciation and amortization.